

Remarks

Reconsideration of this application as amended is respectfully requested.

Claims 5 and 13 stand rejected under 35 U.S.C. §112, first paragraph.

Claims 1-5, 8-13, and 18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,933,853 of *Takagi* ("*Takagi*") and U.S. Patent No. 6,243,795 of *Yang* ("*Yang*").

Claims 6-7, and 14-15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Takagi* and *Yang* and U.S. Patent no. 6,253,290 of *Nakamoto* ("*Nakamoto*").

Claims 16 and 17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Takagi* and *Yang* and U.S. Patent no. 6,324,632 of *McIntosh-Smith* ("*McIntosh-Smith*").

Claim 19 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Takagi* and *Yang* and an excerpt from a publication entitled *How Computers Work*, by White, R., ("*White*").

Claims 1-19 have been cancelled. New claims 20-38 have been added.

The Examiner has objected to the Specification and has stated that the disclosure does not provide a description of an eviction failure. The Examiner has rejected claims 5 and 13 under 35 U.S.C. §112, first paragraph, for similar reasons. Claims 5 and 13 are cancelled. Applicant submits that new claims 20-38 do not include any limitations pertaining to an eviction failure.

The Examiner has rejected claims 1-5, 8-13, and 18 under 35 U.S.C. §103(a) as being unpatentable over *Takagi* and *Yang*.

Applicant respectfully submits, however, that new claim 20 is not obvious in view of *Takagi* and *Yang*. New claim 20 is a method for exclusive caching that includes the limitations

evicting a set of information from a host cache;
storing the information in a storage system cache if
the information is clean when evicted.

(New claim 20) (emphasis added).

Takagi and *Yang* do not disclose or suggest exclusive caching by storing a set of information in a storage system cache if the information is clean when evicted from a host cache as claimed in new claim 20. Instead, *Takagi* teaches discarding information evicted from a host cache if it is clean (*Takagi*, col. 5, lines 22-29) and *Yang* does not disclose a host cache at all.

For example, *Takagi* discloses a high level cache memory 4 (*Takagi*, col. 4, lines 31-33) and a cache HDD 5 disk cache for optic disk drives (*Takagi*, col. 4, lines 34-36) and clearly states that

In staging out data from the cache memory 4 to the cache HDD 5, only when the data is dirty or highly-frequently accessed and not stored in a highly-frequently accessed optical disc 24, it is written into the cache HDD 5. In other cases, writing is not effected and the data is just discarded. Here, data subjected to modifications is defined as dirty and data subjected to no modifications in the CPU 1 is defined as clean. (*Takagi*, col. 5, lines 22-29) (emphasis added). It is submitted that the "other cases" in which *Takagi* discards staged out data are the cases in which the staged out data is clean. In contrast, the exclusive caching of new claim 20 writes evicted information to the storage media cache if it is clean.

Yang discloses only storage system caching. (*Takagi*, col. 2, lines 14-16). *Yang* does disclose a CPU 12 but does not provide any information pertaining to caching in the CPU 12. Moreover, the storage system cache of *Yang*, like the high level cache of *Takagi*, discards evicted data when it is clean. (*Takagi*, col. 4, lines 32-34).

It is therefore respectfully submitted that the method of new claim 20 that includes storing a set of information in a storage system cache if the information is clean when evicted from a host cache is not obvious in view of the teaching of *Takagi* of discarding information evicted from a host cache if it is clean and the storage system caching taught by *Yang*.

Nakamoto and McIntosh-Smith and White do not teach or suggest exclusive caching by storing a set of information in a storage system cache if the information is clean when evicted from a host cache as claimed in new claim 20.

Given that new claims 21-26 depend from new claim 20, it is submitted that new claims 21-26 are not obvious in view of the references cited by the Examiner.

Applicant also submits that new claim 27 is not obvious in view of the references cited by the Examiner. New claim 27 is a computer system that includes limitations similar to the limitations of new claim 20 including storing a set of information in a storage system cache if the information is clean when evicted from a host cache. Therefore, the remarks stated above with respect to new claim 20 also apply to new claim 27.

Given that new claims 28-35 depend from new claim 27, it is submitted that new claims 28-35 are not obvious in view of the references cited by the Examiner.

Applicant further submits that new claim 35 is not obvious in view of the references cited by the Examiner. New claim 35 is a host cache having means for transferring a set of information evicted from the host cache to a storage system using a demote operation if the information is clean. None of the references cited by the Examiner teach or suggest transferring evicted information from a host cache to a storage system if the information is clean as claimed in new claim 35.

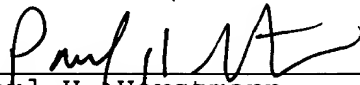
Given that new claims 36-38 depend from new claim 35, it is submitted that new claims 36-38 are not obvious in view of the references cited by the Examiner.

It is respectfully submitted that in view of the amendments and arguments set forth above, the applicable objections and rejections have been overcome.

The Commissioner is authorized to charge any underpayment or credit any overpayment to Deposit Account No. 08-2025 for any matter in connection with this response, including any fee for extension of time, which may be required.

Respectfully submitted,

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